In the Claims:

1-11. (Canceled)

12. (Previously Presented) A method for producing a layer arrangement, the method comprising:

forming a layer of oxygen material and nitrogen material over a substrate that has a plurality of electrically conductive structures and/or over a part of a surface of the electrically conductive structures, the layer being formed using a plasma-enhanced chemical vapor deposition process with nitrogen material being supplied during the supply of silicon material and oxygen material by means of an organic silicon precursor material, the layer of oxygen material and nitrogen material being formed in such a manner that an area free of material remains between the electrically conductive structures;

forming an intermediate layer comprising an electrically insulating material over the layer of oxygen material and nitrogen material; and

selectively forming a covering layer over the intermediate layer such that the area free of material between the electrically conductive structures is sealed from the environment and forms a cavity.

13. (Previously Presented) The method as claimed in claim 12, wherein the organic silicon precursor material comprises tetraethyl orthosilicate.

14. (Previously Presented) The method as claimed in claim 13, wherein nitrogen is used as a further precursor material.

15. (Previously Presented) The method as claimed in claim 14, wherein a flow-rate ratio of tetraethyl orthosilicate to nitrogen is set between 1:10 and 1:1.

16. (Previously Presented) The method as claimed in claim 15, wherein the flow-rate ratio of tetraethyl orthosilicate to nitrogen is set between 1:5 and 1:2.

17. (Previously Presented) The method as claimed in claim 16, wherein the flow-rate ratio of tetraethyl orthosilicate to nitrogen is set between 11:40 and 7:20.

18. (Previously Presented) The method as claimed in claim 12, wherein forming the layer of oxygen material and nitrogen material further comprises supplying helium as a carrier gas.

19. (Previously Presented) The method as claimed in claim 12, wherein the layer of oxygen material and nitrogen material is formed in a process chamber, wherein forming the layer of oxygen material and nitrogen material comprises setting a pressure in the process chamber between 440 Pa and 1750 Pa.

20. (Previously Presented) The method as claimed in claim 19, wherein forming the layer of oxygen material and nitrogen material comprises setting a temperature in the process chamber between 300°C and 500°C.

21. (Previously Presented) A semiconductor structure comprising:

a substrate;

two electrically conductive structures over the substrate, a subarea between the two electrically conductive structures being free of material;

a layer of material containing silicon, oxygen and nitrogen overlying the two electrically conductive structures;

an intermediate layer comprising an electrically insulating material overlying the layer of material containing silicon, oxygen and nitrogen; and

a covering layer overlying the intermediate layer and the subarea between the two electrically conductive structures such that the subarea comprises a material-free area that is sealed from the environment.

22. (Previously Presented) The semiconductor structure as claimed in claim 21, wherein the layer of material containing silicon, oxygen and nitrogen comprises $Si_{1.00}O_{1.90}H_{0.27}C_{0.045}N_{0.06}$.

23. (Previously Presented) The semiconductor structure as claimed in claim 21, wherein the two electrically conductive structures comprise copper structures.

24. (Previously Presented) The semiconductor structure as claimed in claim 21, wherein the material-free area comprises an airgap.

25. (Previously Presented) The semiconductor structure as claimed in claim 21, wherein the layer of material containing silicon, oxygen and nitrogen has been formed by a plasma-enhanced chemical vapor deposition process with nitrogen material being supplied during the supply of silicon material and oxygen material by means of an organic silicon precursor material.

26. (Previously Presented) The semiconductor structure as claimed in claim 21, wherein the intermediate layer is formed from silane-based silicon oxide.

27. (Previously Presented) The semiconductor structure as claimed in claim 21, wherein the covering layer comprises silicon oxide.

28. (Previously Presented) The semiconductor structure as claimed in claim 27, wherein the covering layer is formed based on ozone-activated decomposed tetraethyl orthosilicate.

29. (New) A method for producing a layer arrangement, the method comprising:

forming a single layer of homogenous material comprising silicon, oxygen, and nitrogen over a substrate that has a plurality of electrically conductive structures and/or over a part of a surface of the electrically conductive structures, the single layer of homogenous material being formed using a plasma-enhanced chemical vapor deposition process with nitrogen being supplied during the supply of silicon and oxygen by means of an organic silicon precursor material, the single layer of homogenous material being formed in such a manner that an area free of material remains between the electrically conductive structures;

forming an intermediate layer comprising an electrically insulating material over the single layer of homogenous material; and

selectively forming a covering layer over the intermediate layer such that the area free of material between the electrically conductive structures is sealed from the environment and forms a cavity.

30. (New) The method as claimed in claim 29, wherein the homogenous material comprises $Si_{1.00}O_{1.90}H_{0.27}C_{0.045}N_{0.06}$.

31. (New) The method as claimed in claim 29, wherein a further precursor material comprises nitrogen.